



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,361	08/27/2003	Mart Saarna	0933-0210P	3435
2292	7590	09/23/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			PRIEBE, SCOTT DAVID	
			ART UNIT	PAPER NUMBER
			1633	

DATE MAILED: 09/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/648,361

Applicant(s)

SAARMA ET AL.

Examiner

Scott D. Priebe, Ph.D.

Art Unit

1633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-26 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-6, and 14, drawn to a polynucleotide encoding MANF2, classified in class 536, subclass 23.5.
- II. Claim 7, drawn to a MANF2 polypeptide, classified in class 530, subclass 350.
- III. Claim 8, drawn to a method for production of recombinant MANF2 from recombinant cells in culture, classified in class 435, subclass 69.1.
- IV. Claims 9-12, and 15, drawn to a MANF2 antibody and method of making same, classified in class 530, subclass 387.9.
- V. Claim 18, drawn to a transgenic non-human animal comprising a human or murine MANF2 transgene, classified in class 800, subclass 13.
- VI. Claim 19, drawn to a transgenic non-human animal comprising a disruption of an endogenous MANF2 gene, classified in class 800, subclass 13.
- VII. Claims 20-25, drawn to a method of treatment with a MANF2 nucleic acid molecule, classified in class 514, subclass 44.
- VIII. Claims 20-25, drawn to a method of treatment with a MANF2 polypeptide, classified in class 514, subclass 12.
- IX. Claims 20-25, drawn to a method of treatment with a MANF2 agonist, cannot be classified, no representative compound disclosed.

Art Unit: 1633

- X. Claims 20-25, drawn to a method of treatment with a MANF2 antagonist, cannot be classified, no representative compound disclosed.
- XI. Claims 20-25, drawn to a method of treatment with a MANF2 antibody, classified in class 424, subclass 139.1.
- XII. Claim 26, drawn to a for affinity purification of a MANF2 receptor, classified in class 435, subclass 7.1.

The inventions are distinct, each from the other because of the following reasons:

Invention I and inventions III and VII are related as product and processes of use.

Invention II and inventions IV, VII and XII are related as product and processes of use. Invention IV and invention XI are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the nucleic acid of invention I can be used in either method of inventions III or VII or as a probe in a method of detecting a hMANF2 in a sample. The polypeptide of invention II can be used in any of the methods of IV, VI and X. The antibody of invention IV can be use in the treatment method of invention IX or as an affinity reagent to detect MANF2 in a sample or to purify MANF2 from a sample.

Inventions III and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be

Art Unit: 1633

made by another and materially different process (MPEP § 806.05(f)). In the instant case the polypeptide could be prepared directly from tissue in which it is expressed endogenously, i.e. by non-recombinant methods.

Inventions V and inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination may include a murine MANF2 gene or the human MANF2 gene need not have the sequence of SEQ ID NO: 1 or encode SEQ ID NO; 2. The subcombination of invention I has separate utility such as in a vector for expression of hMANF2 in a cultured cell, as in invention III. The subcombination invention II has separate utility such as its use in invention XII as an affinity reagent.

Although there are no provisions under the section for "Relationship of Inventions" in MPEP 806.05 for inventive groups that are directed to different products, restriction is deemed to be proper because these products appear to constitute patentably distinct inventions for the following reasons. The nucleic acid of invention I can be used to make the protein of invention II. However, as indicated above the protein can be made by other means. Also, nucleic acids and proteins are structurally and functionally different compounds with different uses. Similarly, the polypeptide of invention II can be used to make the antibodies of invention IV, but these two proteins are structurally and functionally different proteins with very different uses.

Although there are no provisions under the section for "Relationship of Inventions" in MPEP 806.05 for inventive groups that are directed to different methods, restriction is deemed to be proper because these methods appear to constitute patentably distinct inventions for the following reasons. The methods of inventions VII-XI each require a structurally different product that operate by different modes of action.

Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). Invention I is unrelated to the methods of inventions IV and VIII-XII because it is not used in any of these methods. Invention II is unrelated to the methods of inventions VII and IX-XI because it is not used in any of these methods, Invention IV is unrelated to the methods of inventions III, VII, VIII, and X-XII because it is not used in any of these methods. Inventions V and VI are unrelated to the methods of inventions III, IV, and VII-XII because they are not used in these methods. The products of I, IV and VI are unrelated to one another because they have no structural or functional relationship to one another, and are not disclosed as being used together. The products of inventions II or IV are unrelated to the product of invention VI because they have no structural or functional relationship to one the non-human animal, and are not disclosed as being used together with the animal. The animals of inventions V and VI are unrelated to each other, and they have mutually exclusive uses and different modes of operation and are not disclosed as being used together.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, the search required for each

Art Unit: 1633

group is not required for the other groups, Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Claims 13, 16 and 17 link(s) inventions I and IV. The restriction requirement between the linked inventions is subject to the nonallowance of the linking claim(s), claims 13, 16, and 17. Upon the allowance of the linking claim(s), the restriction requirement as to the linked inventions shall be withdrawn and any claim(s) depending from or otherwise including all the limitations of the allowable linking claim(s) will be entitled to examination in the instant application. Applicant(s) are advised that if any such claim(s) depending from or including all the limitations of the allowable linking claim(s) is/are presented in a continuation or divisional application, the claims of the continuation or divisional application may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Where a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the

Art Unit: 1633

currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. **Process claims that depend from or otherwise include all the limitations of the patentable product** will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

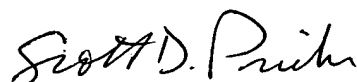
In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of *In re Ochiai*, *In re Brouwer* and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott D. Priebe, Ph.D. whose telephone number is (571) 272-0733. The examiner can normally be reached on M-F, 8:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Nguyen can be reached on (571) 272-0731. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1633

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, reading "Scott D. Priebe". The signature is written in a cursive, flowing style.

Scott D. Priebe, Ph.D.
Primary Examiner
Art Unit 1633